

Abstract of the Disclosure

There is provided a method and so on capable of controlling an external force applied to an animal in such a way as to achieve as a target relation the relation
5 between the external force and a motion variable varying with the motion of the animal.

A value of an external force f applied to a human leg according to an external force function $f(x)$ — on the basis of a measured value of a myoelectric potential x
10 that occurs in the human leg, current I of a motor 220 is controlled according to the set value, and the external force f is applied to the leg through an orthosis 222. A resultant force (the sum of an internal torque and an external torque around a knee joint) F is measured as "a
15 motion variable." Moreover, a value of a factor γ is set according to a factor function $\gamma(f, F)$ on the basis of the set value of the external force f and the measured value of the resultant force F . If a deviation δ between the set value of the factor γ and target value γ_t thereof is equal
20 to or greater than a reference value ε , a new external force function $f(x)$ is set in such a way that the set value of the factor γ approaches the target value γ_t .